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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,781	03/03/2004	Byoung Yull Yang	1594.1334	3217
21171	7590	10/04/2004	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			LU, JIPING	
			ART UNIT	PAPER NUMBER
			3749	

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/790,781	Applicant(s) YANG ET AL.	
	Examiner Jiping Lu	Art Unit 3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 1-7 and 31-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/3/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Election/Restrictions***

1. Applicant's election with traverse of Group II, claims 8-30 in the reply filed on 8/17/2004 is acknowledged. The traversal is on the ground(s) that claims 1-7 and 31-35 are closely related to elected claims 8-30. This is not found persuasive because examiner has established the inventions are separate and distinct in the Paragraph 2 of the last office action. However, if the applicants are willing to amend broad independent method claims to be **co-extensive** with the independent apparatus claims, then, the restriction will be withdrawn. Such extensive amendments to the broad independent method claims 1, 31 would defeat the restriction requirement. The applicants also argued that the examiner would find references containing both groups of inventions in the same field of endeavor. Examiner disagrees because the searches for both inventions are totally different and diverse. Thus, it will create undue burden to the examiner to search everywhere in view of the broad method claims. Again, if the applicants are willing to amend the independent method claims to be co-extensive with the independent apparatus claims, then, the restriction will be withdrawn and the searches will be limited to areas that the examiner would find references containing (35 USC 102) both groups of inventions as suggested by the applicants' remark. In view of the above response to the applicants' traversal of the restriction requirement, it is believed that the examiner has demonstrated that the inventions are in fact separate and distinct. Since the restriction requirement was properly made, then, the requirement is still deemed proper and is therefore made FINAL. An action on the merit for claims 8-30 as follows.

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2. Claims 1-7, 31-35 are withdrawn from further consideration pursuant to 37 CFR

1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 8/17/2004.

Claim Rejections - 35 USC § 112

3. Claims 9, 14-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 calls for two ducts to supply air to the clothes chamber at two different pressures. However, according to specification, the air from both ducts 112, 302 is supplied from a single air source 218. It is not seen how the pressure could be different between two ducts. Please explain. Claim 14, "internal chamber" has no antecedent basis. Therefore, it is not clear which chamber the applicants are claiming. Claim 23, it is not clear if applicants want to claim sensors comprising a humidity sensor and a gas sensor and a temperature sensor and an ozone sensor or to claim a sensor comprises a humidity sensor or a gas sensor or a temperature or an ozone sensor.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 8, 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese patent publication No. 2002-85898.

The publication shows a clothes dryer with accommodating chamber 6, a duct (not numbered, between 2 and 6) to supply heated air into the chamber 6, a duct (not numbered, between 3 and 6) for supply ozone into the chamber 6, a chamber heater 2, a chamber ozonizer 3, and a controller 4 to control the heater and/or ozonizer.

6. Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by the Eisen (U. S. Pat. 5,940,988).

Eisen shows a clothes dryer 10 with a chamber 90, a heater 128, an ozonizer 94 for supplying ozone 32 into the chamber 90 and a control unit 190 which arranged same as claimed.

7. Claim 14 is rejected under 35 U.S.C. 102(b) as being anticipated by Dhaemers (U. S. Pat. 5,546,678).

Dhaemers shows a clothes dryer comprising a chamber 126, a humidifier (Col. 3, lines 14-16) and a heater 73 which are arranged same as claimed.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ou (U. S. Pat. 5,755,040) in view of Japanese patent publication No. 2002-85898 or Ferris (U. S. Pat. 2,406,494).

Ou shows a clothes dryer 1 with a clothes chamber 3, a first air duct G, a second air duct D, a chamber air heater 21, a plurality of vents 161, a door 15 with window which are arranged in the same manner as the broad claims. However, Ou does not show an ozonizer and a control unit to control the heat and/or the ozonizer. The Japanese publication shows a dryer with an ozonizer 3 to sanitize clothes and a controller 4 for controlling the heater 2 and ozonizer 3 same as claimed. Ferris teaches a clothes dryer with an ozonizer 21 and a controller 31 for controlling the heater 10 and ozonizer 21 same as claimed. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the dryer of Ou with an ozonizer and a ozonizer and/or heater controller as taught by Japanese patent publication and Ferris in order to sanitize clothes and improve the drying efficiency.

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11. Claims 15-24 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dhaemers (U. S. Pat. 5,546,678) in view of Japanese patent publication No. 2002-85898 or Ferris (U. S. Pat. 2,406,494).

Dhaemers shows a clothes dryer comprising a chamber 608, a humidifier (Col. 3, lines 14-16), a heater 628, a blower 624 for circulating an atmosphere of the chamber, a filter 623 positioned between the chamber 608 and the blower 624, sensor 112, 113 and a control unit 635 which are arranged same as claimed. However, Dhaemers does not show an ozonizer and a control unit to control the heat and/or the ozonizer. The Japanese publication shows a dryer with an ozonizer 3 to sanitize clothes and a controller 4 for controlling the heater 2 and ozonizer 3 same as claimed. Ferris teaches a clothes dryer with an ozonizer 21 and a controller 31 for controlling the heater 10 and ozonizer 21 same as claimed. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the dryer of Dhaemers with an ozonizer and a ozonizer and/or heater controller as taught by Japanese patent publication and Ferris in order to sanitize clothes and improve the drying efficiency.

12. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dhaemers (U. S. Pat. 5,546,678) in view of Japanese patent publication No. 2002-85898 or Ferris (U. S. Pat. 2,406,494) as applied to claim 16 above, and further in view of Eisen (U. S. Pat. 5,940,988) or Ou (U. s. Pat. 5,555,640).

The clothes dryer of Dhaemers as modified by JP 2002-85898 or Ferris as above includes all that is recited in claim 29 except for the door with transparent window. Eisen teaches a clothes dryer with a door 56 having window 60 for viewing the chamber interior from outside

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same as claimed. Ou('640) teaches a clothes dryer with a door 15 having window 153 for viewing the chamber interior from outside same as claimed. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the clothes dryer of Dhaemers to include a door with windows as taught by Eisen or Ou in order to view the chamber interior from outside.

13. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ou (U. S. Pat. 5,755,040) in view of Dhaemers (U. S. Pat. 5,546,678).

Ou shows a clothes dryer with a chamber 3 and a heater 21 same as claimed. However, Ou does not show a humidifier. Dhaemers teaches a clothes dryer with a humidifier for supply moisture to the internal chamber same as claimed. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the clothes dryer of Ou with a humidifier as taught by Dhaemers in order to supply moisture to the internal chamber.

14. Claims 15-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ou (U. S. Pat. 5,755,040) in view of Dhaemers (U. S. Pat. 5,546,678) and Japanese patent publication No. 2002-85898 or Ferris (U. S. Pat. 2,406,494).

Ou shows a clothes dryer 1 with a clothes chamber 3, a first air duct G, a second air duct D, a chamber air heater 21, a plurality of vents 161, a door 15 with window which are arranged in the same manner as the broad claims. However, Ou does not show a humidifier and an ozonizer and a control unit to control the heat and/or the ozonizer. Dhaemers teaches a clothes dryer with a humidifier for supply moisture to the internal chamber same as claimed. The Japanese publication shows a dryer with an ozonizer 3 to sanitize clothes and a controller 4 for controlling the heater 2 and ozonizer 3 same as claimed. Ferris teaches a clothes dryer with an

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ozonizer 21 and a controller 31 for controlling the heater 10 and ozonizer 21 same as claimed.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the clothes dryer of Ou with a humidifier as taught by Dhaemers in order to supply moisture to the internal chamber and to provide the dryer of Ou with an ozonizer and a ozonizer and/or heater controller as taught by Japanese patent publication and Ferris in order to sanitize clothes and improve the drying efficiency.

Conclusion

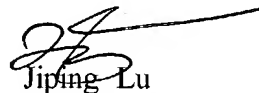
15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hall (U. S. Pat. 2,741,856) shows a clothes dryer with heater and ozonizer. Baltes (U. S. pat. 4,625,432), Lanciaux (U. S. pat. 4,621,438), Gerlach et al. (U. S. Pub. 2003/0126691) shows a clothes dryer. Weiss et al. (U. S. Pat. 5,578,753) shows a humidity control device.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jiping Lu whose telephone number is 703-308-2354. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on 703 308-1935. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jiping Lu
Primary Examiner
Art Unit 3749

J. L.